



PATENT ABSTRACTS OF JAPAN

(11) Publication number:

03211735 A

(43) Date of publication of application: 17.09.91

(51) Int. CI

H01L 21/321

(21) Application number: 02006660

(71) Applicant:

HITACHI LTD

(22) Date of filing: 16.01.90

(72) Inventor:

SAWARA KUNIZO

(54) SEMICONDUCTOR DEVICE

COPYRIGHT: (C)1991,JPO&Japio

(57) Abstract:

PURPOSE: To improve product yield without mechanical stress at a solder bump, deformation, damage, short-circuit between the bumps by arranging a flexible sheet between a substrate and the bumps.

CONSTITUTION: A flexible sheet 17 is arranged between solder bumps 10 and a solder connection part 12. The sheet 17 is formed of a material which can absorb m chanical strain in the case of solder connecting such as low thermal expansion polyimide. It is deviated to a c nnecting direction so that solder bumps 10 are not opposed to the part 12. If the bumps 10 and the part 12 are deviated at the positions, a pattern of conductor wiring for connecting both is formed on the sheet 17. Thus, since the bumps 10 of a semiconductor chip 9 are mer ly brought into contact with the sheet 17 but not brought into pressure contact with a member at the side f a substrate 11, the bumps 10 do not receive mechanical stress, and deformation and connection between the bumps do not occur.

